

O1 Communications, Inc. and Teliix, Inc. Presentation to Commissioners
WC Docket No. 10-90; CC Docket No. 01-92
November 1-2, 2018

1. The Commission should respond to the District of Columbia Circuit Court remand,¹ through CenturyLink's Petition,² and confirm its previous holding that end office switched access charges apply to "over the top" voice over Internet Protocol ("VoIP") calls when a local exchange carrier ("LEC") or its VoIP partner perform the end office functions.
 - a. Sound engineering principles support the Commission's conclusion that over the top VoIP services perform the functional equivalent of end office switching.
 - i. A tandem switch connects switches while an end office switch connects the switch to an end user.
 - ii. Eight functions comprise end office switching using TDM technology: (1) attending; (2) control; (3) busy testing; (4) information receiving; (5) information transmitting; (6) interconnection; (7) altering; and (8) supervising.³
 - iii. These end office functions performed in an IP based call scenario are provided by the partnership of the LEC and the VoIP partner and are comparable to those functions provided in a TDM call scenario.⁴
 1. The LEC's end office switch performs the functions of placing a call and applying calling features to a call.
 2. The LEC's end office switch waits for, and responds to end user commands.
 3. The LEC's end office switch directs the routing of a call by maintaining a database of end user subscribers served by the switch. Based on the information in the database, the appropriate routing is applied to permit the end user to make and receive calls.
 4. The LEC's end office switch monitors the call to determine when the call terminates so that the communications path can be broken and the other party alerted that the call is over.
 5. The LEC's end office switch contains the switching matrix required for call interconnection. The LEC's switch and the VoIP partner's Media Terminal Adaptor perform the necessary interconnection to route the call, properly interpret routing information and connect the call.⁵
 6. While the tandem switch may contain a switching matrix to assist in routing and connecting the call, all of the other functions are unique to the end office switch; they are not performed by tandem switches.

¹ *AT&T Corp. v. Federal Communications Commission*, 841 F.3d 1047 (D.C. Cir. 2016) ("*D.C. Circuit Decision*").

² Petition of CenturyLink for a Declaratory Ruling, *Connect America Fund*, WC Docket No. 10-90, CC Docket No. 01-92 (filed May 11, 2018)

³ *Classification of Remote Central Office Equipment for Accounting Purposes*, RAO Letter 21, 7 FCC Rcd 6075 (1992) ("*RAO Letter 21*").

⁴ See Diagram 1 attached. If the LEC-VoIP "partnership" did not perform the equivalent of TDM switching functionality, VoIP users could not make phone calls.

⁵ See, *RAO Reconsideration Order*, 12 FCC Rcd. 10061, 10067 at ¶11 (1997) ("If, therefore, a piece of remote equipment is capable of interconnecting lines or trunks, i.e., if it has the switching matrix required for call interconnection, the costs of that investment should be classified in [the switching accounts] of our Part 32 rules.")

- iv. In a toll free call scenario, LECs and their VoIP partners control the first switch, which converts calls from IP packets and connects those calls, performing the functions identified above and by doing so, associates the IP address and the called party's telephone number to enable the call to complete.
- b. Ownership of the physical last mile loop is not required to perform end office switching functions.
- i. AT&T and Verizon's main contention to support their argument that over the top VoIP services do not perform end office switching is that ownership of the physical last mile loop is necessary for performance of the interconnection function of end office switching.
 - ii. The split in ownership between the lines and switching has precedent in telephony. For many years and in rural markets, the local telephone company often did not serve customers, including nearby farms, which were located outside the town's boundaries. In reaction, farmers often constructed and maintained local loops from their farmhouses that were connected to the town's telephone switch. For a monthly fee, the telephone company would switch calls to and from the farmers' lines even though it did not own those lines. *See, e.g., Batesville Telephone Co. v. Public Service Commission*, 46 F.2d 226 (7th Cir. 1931).
 - iii. Commission rules assign the physical last mile transport to the carrier common line function, not the end office switching function.⁶
 - iv. The ISP or broadband provider that owns the physical last mile transport over which VoIP traffic is routed does not provide interconnection. The ISP simply passes undifferentiated packets through its network.
 - v. Even in a facilities based VoIP call scenario, ownership of the physical last mile transport is not necessary to perform interconnection – the function of connecting a call through a switching matrix. Rather, there, like in an over the top VoIP scenario, the LEC switch and the Media Terminal Adapter perform interconnection.⁷
 - vi. The last mile physical ISP transport in a VoIP phone call is similar to the role of the ISP when its transport is used to stream TV services like Hulu, Sling, Direct TV NOW and YouTube TV.
 - vii. The ISP merely transports the service providing video and data from the upstream service providers over the last mile transmission paths to the end users via IP packets. The ISP does not participate in the content consumed, it only provides the path.
 - viii. Like in a phone call, in a streaming video application, the end user interacts with the provider of the service consumed, not the ISP that owns the transmission path.
 - ix. In both situations, the ISP may not even be aware of the end user's use of the transport for making a phone call or streaming video.
- c. Commission precedent favors granting the Petition.
- i. The FCC has held that a LEC provides services (access services) where it performs the service and not where end users are located when they dial telephone numbers.⁸ *ARCO*

⁶ 47 C.F.R. §69.304.

⁷ See Diagram 2 attached.

⁸ *Atlantic Richfield Co.*, 59 Rad. Reg. 2d (P&F) 417 (Common Carrier Bureau 1985), app. for rev. denied, 3 FCC Rcd 3089 at ¶ 22 (1988), aff'd sub nom. *Public Utility Comm'n of Texas v. FCC*, 886 F.2d 1325 (D.C. Cir.

- affirmed Atlantic Richfield's right to interconnect at any point it deems beneficial so long as there is no technical harm to the telephone system and/or economic impact which adversely affects the ability of a carrier adequately to serve the public.
- ii. Atlantic Richfield employees working in Plano, Texas made and received long distance calls at their desks but they were billed as if the calls were made in nearby Dallas.
 - iii. Access charges were not billed by GTE that served Plano but, were billed instead by Southwestern Bell that served Dallas. The Bureau held that local switching was properly billed in Dallas, where Atlantic Richfield interconnected to Southwestern Bell.
 - iv. The same result occurred in *Petition of Heritage Village Church and Missionary Fellowship, Inc.*⁹ Heritage, a resort located chiefly in South Carolina but with a portion of the property in North Carolina, elected to install its PBX telephone system in North Carolina and connect with Southern Bell instead of connecting in South Carolina with the Fort Mill Telephone Company.
 - v. Southern Bell, not Fort Mill, received long distance revenue settlements.
 - vi. FCC precedent means that, when a customer desires, it can pick a different LEC to perform access services and that the "last mile" can be hundreds or even thousands of miles long.
 - vii. The Commission's *YMax* decision¹⁰ does not command a different result.
 - viii. The *ARCO-Heritage* cases are still good law as the FCC did not even mention them, much less specifically overrule or modify them, in the *YMax* case, the *2011 Transformation Order*¹¹ or the *2015 Declaratory Ruling*.¹²
 - ix. Therefore, for the purposes of the VoIP Symmetry Rule, the VoIP provider has a right to use a CLEC anywhere in the United States to perform the first point of switching and can lawfully bill and collect local switching.
 - x. Also, since the FCC regulates in a technology neutral manner, the substitution of IP transport for the 40 "exchange trunks" used to connect the Heritage PBX to the Southern Bell end office (85 FCC 2d 787, at ¶ 3) or the privately provided "microwave link" used to deliver Plano traffic to Dallas (59 RR2d 417, at ¶ 4) is immaterial as a matter of law.
- d. Sound public policy favors granting the Petition.
- i. The *Transformation Order* contains major access reforms and includes a number of major compromises, including a decision to transition some switched access charges to bill and keep and for the first time, setting intercarrier compensation rates for VoIP traffic.
 - ii. In doing so, the Commission recognized that a measured transition was required for carriers that received substantial revenues from intercarrier compensation. The Commission also expressly sought to reduce uncertainty and disputes regarding VoIP compensation.¹³

1989). ("ARCO") *ARCO* was cited as authority in *Expanded Interconnection with Local Telephone Company Facilities*, 9 FCC Rcd 5154 (1994).

⁹ For emergency relief with respect to PBX interconnection to telephone service of Southern Bell Tel. & Tel. Co., 88 FCC 2d 1436 at ¶¶ 14-15 (1982) ("*Heritage Village*"), *aff'd sub nom. Fort Mill Telephone Co. v. FCC*, 719 F.2d 89, 91-92 (4th Cir. 1983.)

¹⁰ *AT&T Corp. v. YMax Communications Corp.*, 26 FCC Rcd 5742 (Apr. 8, 2011).

¹¹ *In re Connect America Fund*, 26 FCC Rcd 17663 (rel. Nov. 18, 2011) ("*Transformation Order*").

¹² *In re Connect America Fund*, Declaratory Ruling, 30 FCC Rcd 1587 (2015) ("*2015 Declaratory Ruling*") at ¶¶ 41-49.

¹³ *Transformation Order* at ¶935.

- iii. In adopting rules that allowed the collection of switched access charges for VoIP traffic, the Commission emphasized its decision to permit the collection of switched access charges based on what functions are performed by a LEC and its VoIP partner "regardless of whether the functions performed or the technology used correspond precisely to those used under a traditional TDM architecture." This continues the Commission's long history of regulating on a technology-neutral basis.
- iv. It recognized that its rules "include measures to protect against double billing," and also made "clear that [its] rules do not permit a LEC to charge for functions performed neither by itself or its retail service provider partner."¹⁴
- v. In the over the top VoIP scenario, the LEC and its VoIP partner perform the functional equivalent of end office switching and an IXC is not double-billed. The LEC partnering with the VoIP partner collects end office switching charges. Neither the VoIP partner nor the ISP that provides the physical last mile transport collect access charges for end office switching functions.
- vi. Compensating LECs partnering with VoIP providers at the same rates that TDM LECs are compensated for performing the same functions furthers the Commission's policy of encouraging investment in IP networks. Indeed, to deny equal compensation to IP based network providers achieves the opposite result – discouraging the transition and penalizing those who have invested in IP networks in reliance on Commission policy.
- vii. Compensating LECs at the same rates in an over the top VoIP scenario as those paid to LECs in every other call scenario also furthers the Commission's goal to apply a "symmetrical approach to VoIP-PSTN intercarrier compensation."¹⁵
- viii. Granting the Petition would reaffirm the importance of ensuring there is strong wholesale competition (carriers should be able to decide whether to invest in or buy components of retail services from others).
- ix. Much of the focus of FCC regulation post 1996 Act has been on ensuring the viability of wholesale competition. For example, the FCC looked at the availability of facilities-based competitors when considering continued unbundling requirements for ILEC-provided transport. *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 18 FCC Rcd 16978, at ¶ 396 and .1231 (2003).
- x. The FCC continues to affirm the importance of wholesale competition in *Technology Transitions*, 29 FCC Rcd 1433, at ¶ 59 (2014); see also, *Ensuring Customer Premises Equipment Backup Power for Continuity of Communications*, 29 FCC Rcd 14968, at ¶ 27 (2014).
- xi. Reversing the law that was established by the *Transformation Order* and confirmed in the *Declaratory Ruling* and permitting OTT VoIP services to be compensated at rates less than the rates received by TDM providers and facilities-based VoIP providers performing the same functions would significantly impair the wholesale competition that is provided by LECs that partner with VoIP providers to provide voice services to consumers and businesses.

¹⁴ *Id.* at ¶970.

¹⁵ *Id.* at ¶968.

2. If the Commission were to reverse its previous precedent and hold now that over the top VoIP services are not the functional equivalent of end office switching, the Commission should apply the new law prospectively only from the time of such an order.
 - a. The Supreme Court in *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009) held that an agency is free to change its position on an issue or an interpretation of its rules but that it must first: (1) acknowledge that it is changing course, (2) provide reasons for its new position and (3) address any changes in the factual findings that underlay its prior policy or any serious reliance interests that had arisen from the prior policy.
 - b. Applying a rule retroactively that holds for the first time that only tandem switching charges apply to over the top VoIP services under VoIP Symmetry Rule would be inequitable and unjust.
 - c. For one, the issue has not been subject to Public Notice.
 - d. A holding that over the top VoIP services are not the functional equivalent of end office switching would substitute new law for old law that was reasonably clear.¹⁶
 - e. In the *2015 Declaratory Ruling*, the Commission held that its interpretation of the VoIP Symmetry Rule – that over the top VoIP services perform the functional equivalent of end office switching – did not depart from settled law or substitute new law for old law because the *Transformation Order* was reasonably clear that the VoIP Symmetry rule applied to all VoIP services, including over the top VoIP services.
 - f. To protect the settled expectations of those carriers that relied on the *Transformation Order* and the *2015 Declaratory Ruling* that over the top VoIP services are the functional equivalent of end office switching, any change of the rule should be given prospective effect only.
 - g. VoIP providers reasonably interpreted the *Transformation Order* and the *VoIP Symmetry Rule* to permit them to choose to partner with a CLEC to connect to the PSTN.
 - h. Applying a rule retroactively that only tandem switching charges are due for the provision of over the top VoIP services would punish LECs and their VoIP provider customers for operating consistent with a clear Commission proclamation of the law that applied from 2011 at least until the *D.C. Circuit's Decision* in November 2016.¹⁷
 - i. LECs and their VoIP partners are providing services to IXC's. It is reasonable for them to be compensated for the services provided.
 - j. AT&T and Verizon would seize upon any reversal by seeking refunds of millions of dollars previously paid to numerous LECs over several years, which would threaten the survival of competition in the VoIP market.
 - k. Applying any reversal retroactively would also be contrary to the key Commission goals of promoting investment in and deployment of IP networks and applying a "symmetrical approach to VoIP-PSTN intercarrier compensation."¹⁸
 - l. Any reversal of Commission precedent should therefore only apply from the effective date of the reversal forward (or consistent with any transition set forth in any order reversing prior precedent).

¹⁶ See e.g., *NLRB v. Majestic Weaving Co.*, 355 F.2d 854 (2nd Cir. 1966) ("But the problem of retroactive application has a somewhat different aspect in cases not of first but of second impression, where an agency alters an established rule defining permissible conduct which has been generally recognized and relied on throughout the industry that it regulates.").

¹⁷ Even then, the D.C. Circuit did not reverse the Commission's ruling that the *Transformation Order* held that over the top VoIP services are the functional equivalent of end office switching. *D.C. Circuit Decision* at 1049.

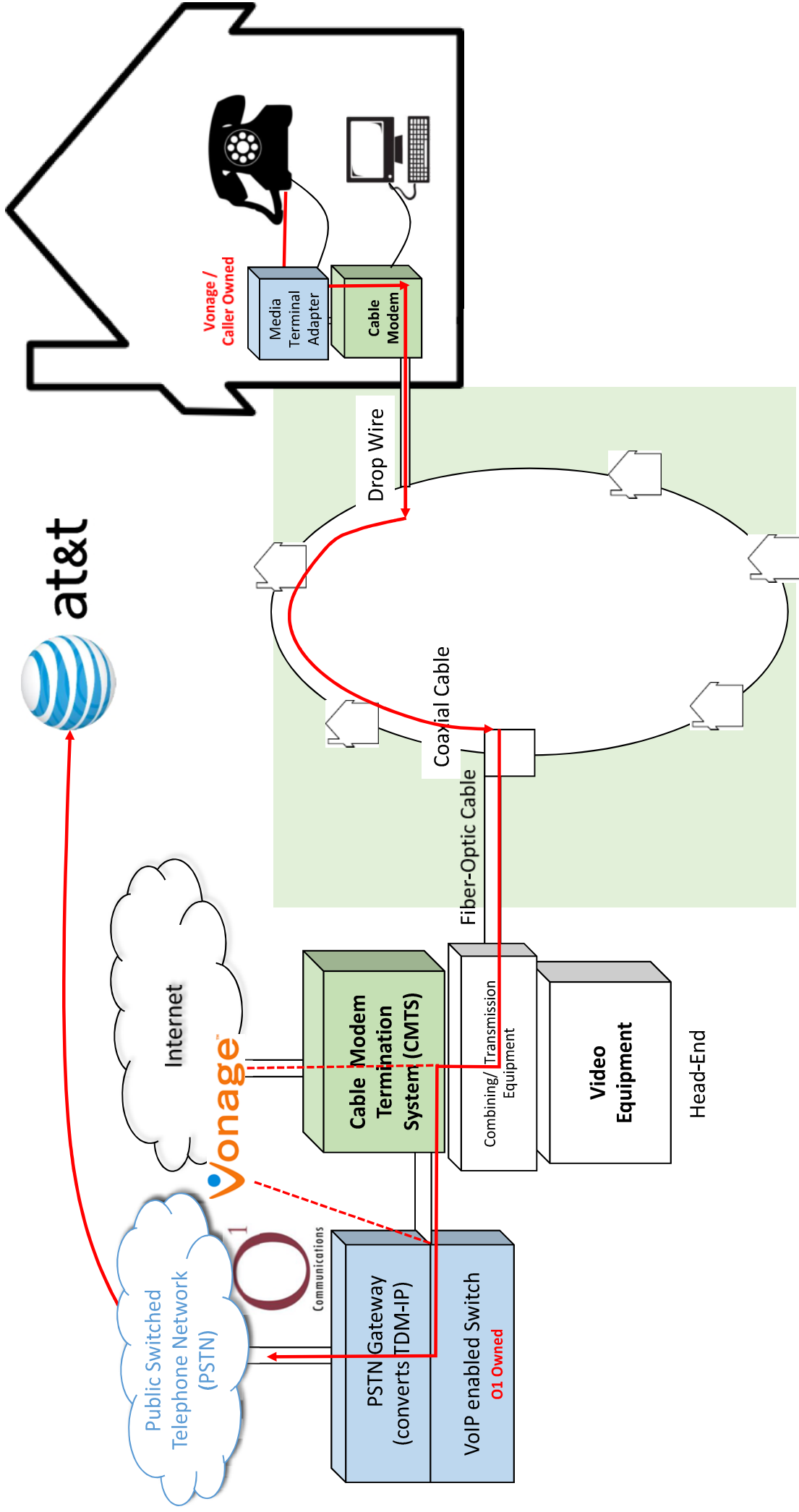
¹⁸ *Transformation Order* at ¶968.

3. The Commission should confirm its policy against disruptive interexchange carrier ("IXC") self-help tactics and hold that IXCs found to engage in such practices will be subject to penalties.
- a. Long-standing Commission precedent condemns IXC self-help non-payment tactics in intercarrier compensation disputes.¹⁹
 - b. Words of caution from the Commission regarding IXC payment obligations have not been sufficient to stop AT&T and Verizon from unilaterally withholding payment of access charges with little or no legal or factual support for the disputes.
 - c. AT&T and Verizon routinely withhold payment based on unsupported disputes. They also withhold payment of undisputed charges in attempt to recoup previous payments made prior to raising a dispute.
 - d. These tactics severely debilitate a LEC's ability to operate. Cash flow is impaired; opportunities are foregone. This is particularly true when AT&T and Verizon pay some carriers for the same service for which they deny or reduce payment to others.
 - e. These tactics force LECs to either engage in time and resource-consuming, expensive litigation to enforce their rights or to avoid litigation, settle the disputes for less than the amount the LEC legally deserves.
 - f. LECs have been forced by self-help, non-payment tactics to divert hundreds of thousands of dollars and hundreds of personnel hours from running and growing their businesses to negotiating billing disputes and engaging in litigation.
 - g. Two federal courts have recently enforced the Commission's policy against self-help non-payment.²⁰ Other courts presiding over cases involving the same conduct have not enforced this important Commission policy.
 - h. The lack of uniform enforcement by the Courts coupled with the lack of enforcement by the Commission effectively reward AT&T and Verizon's self-help non-payment practices. Despite recent court precedent enforcing the Commission policy, they continue to withhold payment of access charge payments with little or no legal or factual support.
 - i. To remedy this abuse, the Commission should confirm its policy against these IXC tactics and hold that IXCs that violate the policy must pay a significant fine for doing so. The Commission should also adopt a process for LECs to resolve these IXC abuses expeditiously.

¹⁹*In re MCI Telecommunications Corporation, American Telephone and Telegraph Company and the Pacific Telephone and Telegraph Company*, Memorandum Opinion and Order, FCC 76-685 (rel. July 30, 1976); *In re Business WATS, Inc. v. AT&T Corp.*, Memorandum Opinion and Order, DA 920-1613 (Comm.Carr.Bur. rel. Dec. 7, 1992); *Transformation Order* at ¶¶700 and 947.

²⁰*Peerless Network, Inc. v. MCI Communications Services, Inc.*, 2018 WL 137834 at *19-20 (N.D. Ill. Mar. 16, 2018); *CenturyTel of Chatham, LC v. Sprint Communs. Co., L.P.*, 861 F.3d 566, 576-578 (5th Cir. 2017).

ATTACHMENT 1



ATTACHMENT 2

